IN THE CLAIMS

Claim 7 is amended as follows:

7. (Once Amended) A data storing device comprising:

a housing defined by first and second housing portions, the second housing portion being movable relative to the first housing portion between mated and open positions;

an integrated circuit supported by the first housing portion;

a battery in the housing; [and]

a conductor supported by and movable with the second housing portion, the conductor coupling the battery to the integrated circuit when the second housing portion is in the mated position; and

wherein the first and second housing portions enclose and hermetically seal the integrated circuit and the battery when the first and second housing portions are in the mated position.

Claim 16 (cancelled).

Claim 19 is amended as follows:

19. (Twice Amended) A portable data storing device comprising:

a housing defined by first and second housing portions each including planar surfaces;

an integrated circuit including a static random access memory configured to store the data, the integrated circuit being supported from the first housing portion;

a thin film battery in the housing; [and]

a conductor supported by and movable with the second housing portion, the conductor coupling the battery to the integrated circuit so that the integrated circuit is powered by the battery when the first and second portions are mated and thereby resulting in the static random access memory being powered by the battery and so that the integrated circuit is not powered by the battery when the first and second portions are not mated; and

wherein the conductor completes a circuit and supplies electrical power to the integrated circuit when the first and second portions of the housing are sealed together and does not complete the circuit or supply the electrical power to the integrated circuit when the first and second portions are not sealed together.

25. (Once Amended) A portable data storing device comprising:

a housing defined by first and second housing portions each including planar surfaces;

an integrated circuit including a random access memory configured to store the data, the integrated circuit being supported from the first housing portion; a thin film battery in the housing;

a conductor supported by and movable with the second housing portion, the conductor coupling the battery to the integrated circuit so that the integrated circuit is powered by the battery when the first and second portions are mated and thereby resulting in the memory being powered by the battery and so that the integrated circuit is not powered by the battery when the first and second portions are not mated: and

wherein the conductor completes a circuit and supplies electrical power to the integrated circuit when the first and second housing portions of the housing are sealed together and does not complete the circuit or supply electrical power to the integrated circuit when the first and second portions are not sealed together.

26. (Once Amended) A passive radio frequency identification device comprising:

a first flexible film having a peripheral portion;

a second flexible film laminated directly to the peripheral portion of the first flexible film;

a first dipole antenna disposed directly on the first film; and

a single integrated circuit having substantially all circuitry formed on a surface of the integrated circuit facing the first film, the integrated circuit being coupled to the first dipole antenna and including memory to store an identification number, a receiver coupled to the first dipole antenna to receive and decode data from a spread spectrum signal in the range of approximately 200MHz to 10GHz, control logic to perform a comparison between the received

data and at least a portion of the identification number, and a transmitter coupled to the first dipole antenna to transmit a response based on the comparison.

27. The radio frequency identification device of claim 26 further comprising an adhesive backing to affix the circuit to a surface.

28. The radio frequency identification device of claim 26, further comprising a second dipole antenna coupled to the integrated circuit and disposed between the first and second films, wherein the first and second dipole antennas are approximately perpendicular to each other in a generally X-shaped configuration.

29. The radio frequency identification device of claim 26, wherein the first dipole antenna comprises a printed conductive ink or epoxy.

30. The radio frequency identification device of claim 26, wherein only two terminals connect off-chip components to the integrated circuit.

31. The radio frequency identification device of claim 26, further comprising a printed label adhered to the first flexible film.

32. The radio frequency identification device of claim 26, wherein the package is bar coded.

Claims 33-63 (cancelled).

64. The radio frequency identification device of claim 26, wherein the second flexible film has a peripheral portion which is laminated directly to the peripheral portion of the first flexible film to form an approximately hermetically sealed flexible package, and wherein the first dipole antenna is disposed between the first and second films, and wherein the single integrated circuit is disposed between the first and second films, and wherein the integrated circuit is coupled to the first dipole antenna using a conductive epoxy.

65. (New) A passive radio frequency identification device comprising:

a first flexible plastic film having a first surface upon which a first dipole antenna is directly disposed, wherein the first surface comprises a peripheral region at least partially surrounding the first antenna;

a second flexible material having a second surface laminated directly to the peripheral region of the first surface; and

a single integrated circuit coupled to the first antenna and including memory to store a value, a receiver coupled to the first antenna to receive and decode data from an RF signal in the range of 800MHz to 8GHz, control logic to make a comparison between the data and the value, and a transmitter coupled to the first antenna to provide a response based on the comparison.

66. (New) The device of claim 65, further comprising a second dipole antenna coupled to the integrated circuit and disposed between the first film and the second material, wherein the first and second dipole antennas are approximately perpendicular to each other where they cross.

67. (New) The device of claim 65, wherein only two terminals connect off-chip components to the integrated circuit.

68. (New) The device of claim 65, further comprising an adhesive backing to affix the device to a surface.

69. (New) The device of claim 66, further comprising a printed label.

70. (New) The device of claim 69, further comprising a bar code.

71. (New) The system of claim 65, wherein the control logic is configured to store information received by the receiver into the memory.

72. (New) A system comprising:

a plurality of passive radio frequency identification (RFID) devices, each of the devices affixed to a respective one of a plurality of articles to track the articles, wherein at least one of the devices comprises:

a first thin polymer film having a dipole antenna disposed over a first surface of the first film, wherein the first surface comprises an outer boundary;

a second thin layer of material having a second surface laminated directly to the outer boundary; and

an integrated circuit coupled to the antenna and including memory storing a code, a receiver to receive data from an RF signal in the range of 800MHz to 8GHz, control logic to use the code and the data to determine if a response is appropriate, and a transmitter to communicate the response if the control logic determines the response is appropriate; and

a remote source to provide RF charging signals to power the devices.

73. (New) The system of claim 72, wherein only two terminals connect off-chip elements to the integrated circuit of the one of the devices.

74. (New) The system of claim 72 wherein each of the devices further comprises a respective adhesive backing and a respective bar code.

75. (New) The system of claim 72, wherein each of the devices comprises a respective printed surface.

76. (New) The system of claim 75, wherein each of the devices further comprises a respective bar code.

77. (New) The system of claim 76, wherein the control logic is configured to store information received by the receiver into the memory.

78. (New) A system comprising:

a roll of backing material;

a plurality of passive radio frequency identification (RFID) devices removably adhered to the roll of backing material, each of the devices comprising:

a respective first sheet having a respective first surface on which a respective first dipole antenna is disposed;

a respective second sheet a respective second surface laminated to a portion of the respective first surface;

a respective integrated circuit coupled to the respective antenna and including respective memory configured to store a respective value, a respective receiver configured to receive a wireless signal from an interrogator at a frequency of 800MHz to 8GHz, and a respective transmitter to communicate the respective value to the interrogator; and

a respective adhesive backing; and

a dispenser to hold the roll and to provide convenient dispensing of individual ones of the RFID devices.

79. (New) The system of claim 78, wherein only two respective terminals connect off-chip elements to the respective integrated circuit.

80. (New) The system of claim 78, wherein each of the devices comprises a respective printable surface.

81. (New) The system of claim 78, further comprising an apparatus to provide an RF signal to remotely power the devices.